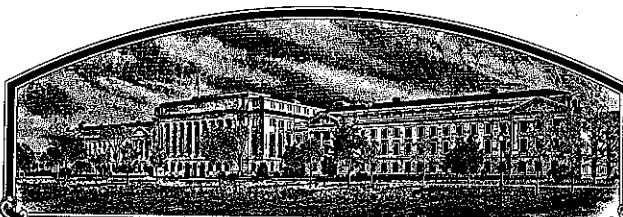


No.

9500175



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

PERA Genetics Corporation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'CX173'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of August in the year of our Lord one thousand nine hundred and ninety-six.

Attest:

Marsla A. Starnes
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Don H. Slickman
Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)

DEKALB Genetics Corporation

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

EX418c

3. VARIETY NAME

CX173

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)

3100 Sycamore Road
DeKalb, IL 60115

5. TELEPHONE (include area code)

(815) 758-3461

6. FAX (include area code)

(815) 756-2094

FOR OFFICIAL USE ONLY

PVPO NUMBER

9500175

DATE

MAY 17, 1995

FILING AND EXAMINATION FEE

2450.00

DATE

May 15, 1995

CERTIFICATION FEE

300.00

DATE

JULY 15, 1996

7. GENUS AND SPECIES NAME

Glycine max L. Merr.

8. FAMILY NAME (Botanical)

Leguminosae

9. CROP KIND NAME (Common name)

Soybean

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)

Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION

Delaware

12. DATE OF INCORPORATION

June 15, 1988

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Robert E. Roman, Jr.

&

R. Mark Lawson, Ph.D.

DEKALB Genetics Corporation

DEKALB Genetics Corporation

3100 Sycamore Road

3100 Sycamore Road

DeKalb, IL 60115

DeKalb, IL 60115

14. TELEPHONE (include area code)

(815) 758-3461

15. FAX (include area code)

(815) 756-2094

16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

- a. ☒ Exhibit A. Origin and Breeding History of the Variety
- b. ☒ Exhibit B. Statement of Distinctness
- c. ☒ Exhibit C. Objective Description of the Variety
- d. ☐ Exhibit D. Additional Description of the Variety
- e. ☒ Exhibit E. Statement of the Basis of the Applicant's Ownership
- f. ☒ Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)
- g. ☒ Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)

17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)

☐ YES (If "yes," answer items 18 and 19 below)

☒ NO (If "no," go to item 20)

18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☐ YES

☐ NO

19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☐ FOUNDATION

☐ REGISTERED

☐ CERTIFIED

20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?

☒ YES (If "yes," give names of countries and dates)

☐ NO

USA Spring 1995

21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s))

Mark Lawson

SIGNATURE OF APPLICANT (Owner(s))

NAME (Please print or type)

R. Mark Lawson

CAPACITY OR TITLE

DATE

Director, Research Operations

5-5-95

CAPACITY OR TITLE

DATE

EXHIBIT A**Origin and Breeding History**
CX173

CX173 was developed in a pedigree program from a cross between CX210 and a selection from EX925 (MO203.CX366).

| | |
|-------------|---|
| Winter 1988 | Cross CX210 x EX925 F1, F2, F3, F4 generations advanced by SSD in Hawaii |
| 1989 | F5 generation planted at Conrad, IA Single plants were selected. Greenhouse screening for phytophthora resistance was done and resistant plants were selected. |
| 1990 | F6 rows at Gladbrook IA. Row 15-31 selected and bulked. |

Seed from the F6 plant row was bulked and yield tested in 1991 - 1994. Summer seed increases occurred in the US in 1992, 1993, and 1994. A winter seed increase was produced in Argentina during 1993-94.

The variety was given the name CX173 and released in the spring of 1995.

Statement of Stability and Uniformity

Soybean variety CX173 has been judged to be uniform for breeding use and testing after 4 generations of selfing. CX173 was reproduced and judged uniform and stable for an additional 4 generations.

Statement of Variants

CX173 shows no variants other than what would normally be expected due to environment or that would occur for almost any characteristic during the course of repeated sexual reproduction.

EXHIBIT B**Statement of Distinctness**

CX173 is most similar to the soybean variety CX210. CX173 differs from CX210 for the following characteristics:

| <u>TRAIT</u> | <u>CX173</u> | <u>CX210</u> |
|------------------------------|--------------|--------------|
| Hypocotyl pigmentation | Dark purple | Light purple |
| Phytophthora resistance gene | Rps1c | rps |

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OBJECTIVE DESCRIPTION OF VARIETY

Soybean Variety CX173

| |
|---|
| APPLICANT: DEKALB Genetics Corporation 3100 Sycamore Road DeKalb, IL 60115 |
|---|

1. SEED SHAPE: Elongate
2. SEED COAT COLOR: (Mature Seed) Yellow
3. SEED COAT LUSTER: (Mature Hand Shelled Seed) Dull
4. SEED SIZE: (Mature Seed) 13.8 grams/100 seeds
5. HILUM COLOR: (Mature Seed) Black
6. COTYLEDON COLOR: (Mature Seed) Yellow
7. SEED PROTEIN PEROXIDASE ACTIVITY: High
8. SEED PROTEIN ELECTROPHORETIC BAND:
9. HYPOCOTYL COLOR: Dark purple
10. LEAFLET SHAPE: Ovate
11. LEAFLET SIZE: Medium
12. LEAF COLOR: Medium green
13. FLOWER COLOR: Purple
14. POD COLOR: Brown
15. PLANT PUBESCENCE COLOR: Tawny
16. PLANT TYPE: Medium
17. PLANT HABIT: Indeterminate
18. MATURITY GROUP: I

19. DISEASE REACTION: (0=Not Tested; 1=Susceptible; 2=Resistant)Bacterial Diseases:

Bacterial Pustule: 0
 Bacterial Blight: 0
 Wildfire: 0

Viral Diseases:

Bud Blight: 0
 Yellow Mosaic: 0
 Cowpea Mosaic: 0
 Pod Mottle: 0
 Seed Mottle: 0

Nematode Diseases:

Soybean Cyst Nematode
 Race(s):3 1
 Lance Nematode: 0
 Southern Root Knot Nematode: 0
 Northern Root Knot Nematode: 0
 Peanut Root Knot Nematode: 0
 Reniform Nematode: 0
 Other:

Fungal Diseases:

Brown Spot: 0
 Frogeye Leaf Spot: 0
 Target Spot: 0
 Downy Mildew: 0
 Powdery Mildew: 0
 Brown Stem Rot: 0
 Stem Canker: 0
 Pod and Stem Blight: 0
 Purple Seed Stain: 0
 Rhizoctonia Root Rot: 0
 Phytophthora Rot

Race(s):1 2
 3 2
 4 1

20. PHYSIOLOGICAL RESPONSES: (0=Not Tested; 1=Susceptible; 2=Resistant)

Iron Chlorosis on Calcareous Soil: 1
 Other:

21. INSECT REACTION: (0=Not Tested; 1=Susceptible; 2=Resistant)

Mexican Bean Beetle: 0
 Potato Leaf Hopper: 0
 Other: 0

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

| <u>Character</u> | <u>Name of Variety</u> | <u>Character</u> | <u>Name of Variety</u> |
|------------------|------------------------|-----------------------|------------------------|
| Plant Shape | CX210 | Seed Coat Luster | CX210 |
| Leaf Shape | CX210 | Seed Size | CX210 |
| Leaf Color | CX210 | Seed Shape | CX210 |
| Leaf Size | CX210 | Seedling Pigmentation | CX232 |

23. DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

| VARIETY | NO OF DAYS MATURITY | PLANT LODGING SCORE | PLANT HEIGHT CM | LEAFLET SIZE | | SEED CONTENT | | SEED SIZE G/100 SEEDS | NO. SEEDS /POD |
|---------|---------------------|---------------------|-----------------|--------------|-----------|--------------|-------|-----------------------|----------------|
| | | | | Width cm | Length cm | % Prot | % Oil | | |
| CX173 | 0 | 6.9 | 89.4 | | | 34.9 | 18.4 | 13.8 | 2.5 |
| CX210 | +4 | 6.5 | 102.9 | | | 34.6 | 20.5 | 14.6 | 2.5 |

EXHIBIT E**Statement of the Basis of Applicant's Ownership**

DEKALB Genetics Corporation is the sole, original, and first breeder of the soybean variety CX173.

2000 MAR 12 10:11

2000 MAR 12 10:11
BELT

REPRODUCE LOCALLY. Include form number and date on all reproductions.

FORM APPROVED - OMB NO. 0581-0056

EXPIRES: 12-31-98

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

| | | |
|--|---|--|
| 1. NAME OF APPLICANT(S) DEKALB Genetics Corporation | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER EX418C | 3. VARIETY NAME CX173 |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 3100 Sycamore Road DeKalb, IL 60115 | 5. TELEPHONE (include area code) (815) 758-3461 | 6. FAX (include area code) (815) 758-4106 |
| 7. PVPO NUMBER 9500175 | | |

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country _____

☒ YES ☐ NO

10. Is the applicant the original breeder? If no, please answer the following:

☐ YES ☐ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country _____

☐ YES ☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country _____

11. Additional explanation on ownership (if needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Juneteenth Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0056 and form number in your letter.

Under the PRA of 1996, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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